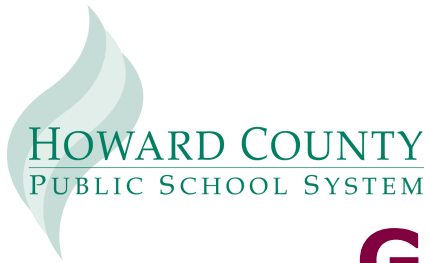


# The First Annual Howard County Environmental Sustainability Summit

**Ken Roey**  
**Executive Director, Facilities**  
**Wednesday, April 4, 2009**

---



# Going Green at HCPSS

## Setting the Stage- Education

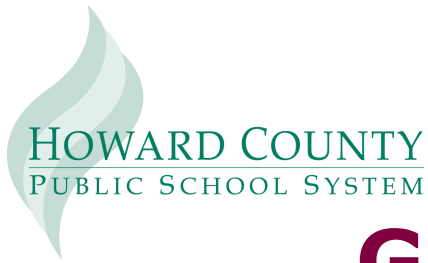
- Defining "Green" and understanding the true cost
- Spreading understanding to all 50,000+ students and staff

## Walking the Talk- Investments

- Energy performance contracts (EPC)
- LEED certification (Northfield ES)
- Procurement of green products

## The Challenge- Changing the Culture

- Elementary Science Office has partnered w/HC Conservancy, Master Gardeners and Recreation and Parks to support MAEOE Green Schools Program
  - Involving school community in broad range of sustainability aspects including; reduction of energy use; outdoor learning and recycling
  - Changing the way we live.... In an austere economic environment
-



# Going Green at HCPSS

## Recycling

- 1000+ tons in 2007-8, best in Baltimore region
- Collaborating w/Bureau of Environmental Services

## Energy conservation measures

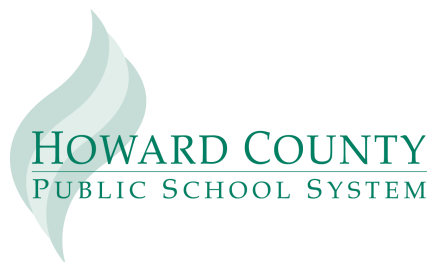
- >\$600K guaranteed annual savings from EPC involving 13 schools
- Retro commissioning, installation of energy management systems with energy efficient equipment, and portable classroom controls

## Green Construction

- Northfield ES is on target for LEED Silver certification, first geothermal system
- White roofs

## Other

- Potential reduction in solid waste stream >30 tons by switching to exclusively green floor products
  - Collaborating w/Bureau of Environmental Services in creating bio retention facilities; creating outdoor learning habitats
-



### **Burleigh Manor Middle School Environmental Site Design (Bioretention Facility)**

A bioretention facility was designed and constructed by Howard County in order to treat the storm runoff from the back parking lot of the school. The 7<sup>th</sup> grade science students were made "project partners" – they learned about stormwater management, they helped with landscape design and with the actual planting, and they continue to perform routine maintenance.

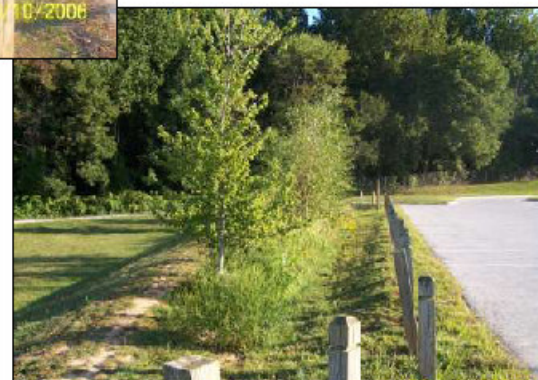
Project Costs: \$79,000  
Project Funding Source:  
Howard County Dept of Public Works  
Project Funded: 2006  
Project Completed: 2006  
Project Size: 5,000 sq. ft.



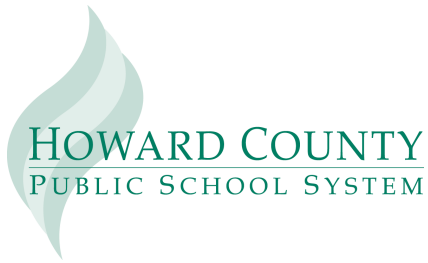
Prior To Construction  
(Above photograph)



Immediately After Planting  
(Left photograph)



Two Years After Project Completion  
(Right photograph)

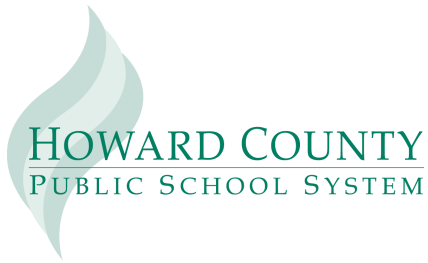


## Maryland Green School Awards Program

“A holistic, integrated approach to learning that incorporates local environmental issue investigation and professional development with environmental best management practices and community stewardship.”

- Clarksville Elementary School: 1999
  - Dunloggin Middle School: 2007
  - Glenwood Middle School: 2001
  - Hammond Elementary School: 2005
  - Hammond Middle School: 2002, 2006
  - Lime Kiln Middle School: 2008
  - Reservoir High School: 2007
  - River Hill High School: 2008
  - Triadelphia Ridge Elementary School: 2002, 2007
  - Waterloo Elementary School: 1999
  - West Friendship Elementary School: 2007
- 





# Speakers

- **Ned Tillman**, Chair, Env. Sustainability Board
  - **Josh Feldmark**, Office of Env. Sustainability
  - **Liz Bobo**, Maryland House of Delegates
  - **Jim Caldwell**, CivicUs - Business Community
  - **Ken Roey**, HC Public School System
  - **Lynn Coleman**, Howard Community College
  - **Maura Rossman**, Health Department
  - **Kathy Zimmerman**, HCEDA – Agriculture
  
  - **Ken Ulman**, County Executive
-